

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PCT NATIONAL STAGE APPLICATION OF  
COLLINGWOOD ET AL.

INTERNATIONAL APPLICATION NO: PCT/EP2004/006795

FILED: 23 JUNE 2004

U.S. APPLICATION NO: Not Yet Known

35 USC §371 DATE: Herewith

FOR: PIPERIDINIUM AND PYRROLIDINIUM DERIVATIVES AS LIGANDS  
FOR THE MUSCARINIC M3 RECEPTOR

**MS: Amendment**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This paper is being filed within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 of the international application. Therefore, no fees are required. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 19-0134.

In accordance with 37 C.F.R. §1.56, applicants wish to call the Examiner's attention to the references cited on the attached form(s) PTO-1449.

The listed references were cited in the international stage search report. Since these references are of record in the instant PCT application PCT/EP2004/006795, copies are not enclosed herewith.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form(s).

Respectfully submitted,

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Date: 12/19/05

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.

PR/4-33239A

APPLICATION NO.

Not Yet Known

APPLICANT

COLLINGWOOD ET AL.

FILING DATE

Herewith

Group

1499 Rec'd PCT/PTO 19 DEC 2009

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AM	0 073 645	3/9/83	EP			<input type="checkbox"/>	<input type="checkbox"/>
	AN	1 302 458	4/16/03	EP			<input type="checkbox"/>	<input type="checkbox"/>
	AO	92/06958	4/30/92	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AP	03/087094	10/23/03	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AQ						<input type="checkbox"/>	<input type="checkbox"/>

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

	AR	Kutsuma, et al., "1-(1,3-Dioxolan-4-ylmethyl)piperidinol Derivatives", Chemical Abstracts, Database Accession No. 1978:6859 and JP 52 083763, July 12, 1977.
	AS	Kutsuma et al., "Stereoisomers of 4-acyloxy-1-alkyl-1-(1,3-dioxolan-4-ylmethyl)piperidinium Salt Derivatives", Chemical Abstracts, Database Accession No. 1979:405219 and JP 54 027570, March 1, 1979.
	AT	"4-Acyloxy-1-(1,3-dioxolan-2-ylmethyl)piperidine Derivatives", Chemical Abstracts, Database Accession No. 1981:603921 and JP 56 079688, June 30, 1981.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.

PR/4-33239A

APPLICATION NO.

Not Yet Known

APPLICANT

COLLINGWOOD ET AL.

FILING DATE

Herewith

Group

IAP9 Rec'd PCT/PTO 19 DEC 2009

EXAMINER  
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

BA	"alpha.-Cyclic Aminophenylacetic Acid Esters and Their Quarternary Ammonium Salts", Chemical Abstracts, Database Accession No. 1984:120902 and JP 58 208270, December 3, 1983.
BB	Yoshida et al., "Structure-Activity Relationship of 3- and 4-acyloxy-1-(1,3-dioxolan-4-ylmethyl)piperidine Derivatives", Chemical and Pharmaceutical Bulletin, Vol. 33, No. 2, pp. 818-822 (1985).
BC	Sugai et al., "Studies on Spasmolytics. II. Synthesis and Anticholinergic Activities of 4-acyloxy-1-alkyl-1-(1,3-dioxolan-4-ylmethyl)piperidinium Compounds", Chemical and Pharmaceutical Bulletin, Vol. 32, No. 3, pp. 977-985 (1984).
BD	Sugai et al., "Studies on Spasmolytics. III. Synthesis and Anticholinergic Activity of 4-(acyloxy)-1-(1,3-dioxolan-2-ylmethyl)piperidines and Their Quarternary Salts", Chemical and Pharmaceutical Bulletin, Vol. 32, No. 3, pp. 1126-1134 (1984).
BE	Kajiwara et al., "Studies on Spasmolytics. VI. Pharmacological Studies of Stereoisomeric 1,4-trans- and...", Chemical Abstracts, Database Accession No. 1986:14939 and Yakugaku Zasshi, Vol. 105, No. 10, pp. 983-989 (1985).
BF	Waelbroeck et al., "Binding Properties of Nine 4-diphenyl-acetoxy-N-methylpiperidine (4-DAMP) Analogs to M1, M2, M3 and Putative M4 Muscarinic Receptor Subtypes", British Journal of Pharmacology, Vol. 105, No. 1, pp. 97-102 (1992).
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BN	

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.